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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,427	10/05/2006	Thomas J. Webster	3220-100466	3926
23644 7590 04/08/2010 BARNES & THORNBURG LLP P.O. BOX 2786 CHICAGO, IL 60690-2786				
EXAMINER SNOW, BRUCE EDWARD				
ART UNIT 3738		PAPER NUMBER		
NOTIFICATION DATE 04/08/2010		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patent-ch@btlaw.com

Office Action Summary

Application No.

10/550,427

Applicant(s)

WEBSTER ET AL.

Examiner

Bruce E. Snow

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 6, 8, 14, 15 and 22-35 is/are pending in the application.
- 4a) Of the above claim(s) 2-4, 6, 8 and 27-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14, 15, 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- 7) ☐ Paper No(s)/Mail Date 2/16/10, 9/21/05

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group C in the reply filed on 2/12/10 is acknowledged. The traversal is on the ground(s) that the product claims of Group A are "directed to the same neural prosthesis" as Group C. This is not found persuasive because Group C is not a product claim but a "Use of a neural implant that minimizes scar formation". It is the Examiner's position that the restriction was properly done according to PCT rule 13.2 because the claims lack the same or corresponding special technical feature.

The requirement is still deemed proper and is therefore made FINAL. Claims 2-4, 6 and 8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention.

Newly submitted claims 27-35 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: these claims are directed to a method of minimizing glial scar tissue formation upon implantation of a neural prostheses which would have properly restricted under according to PCT rule 13.2.

Since applicant has received an action on the merits (which included a restriction) for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 27-35 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Information Disclosure Statement

The information disclosure statement filed 2/16/10 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 14-15 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith et al (2004/0131753).

Smith et al teaches using an implant that minimizes scar formation comprising coating the implantable device with a nanomaterial. See at least paragraph 0015 stating, "[i]t is still another object of the present invention to provide at least one nanofiber, as above, which is capable of being coated or otherwise applied to medical devices." Regarding the medical device capable of being termed an implant, see at least paragraph 0022 and 0023. An implant as taught implanted in the body is inherently secured in the neural tissue. Note the teaching of a "nanofiber coating, because of the small size and large surface area per unit mass of the nanofibers, provides a much larger surface area while minimizing changes in other properties. Such a coating can be utilized on any implant devices, which would be otherwise likely to cause an inflammatory response, to minimize that response." It is the examiner's position that reducing the inflammatory response minimizes scar formation. Additionally, all steps set forth in the body of the claim are fulfilled, therefore, the preamble is fulfilled.

Claims 14-15, 22-24, 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Glatkowski et al (2004/0071949).

Glatkowski et al teaches coating an implant with a nanomaterial comprising nanotubes and a polymer. The implant would be inherently implanted and the coating would be fully capable of minimizing scar formation. See at least claims 21 and 39:

21. The coated substrate of claim 20, wherein the substrate is part of a device component selected from the group consisting of keypads, catheters, integrated circuits, printed wire boards, printed circuit boards, hybrids, transducers, sensors, cores, accelerometers, catheters, coils, fiber optic components, heat exchangers, pacemakers, implants, flow meters, magnets, photoelectric cells, electrosurgical instruments, and plastic encapsulated microcircuits.

39. The method of claim 33, wherein the carbon nanotube-containing layer further comprises a polymeric material, wherein the polymeric material comprises a material selected from the group consisting of polyethylene, polypropylene, polyvinyl chloride, styrenic, polyurethane, polyimide, polycarbonate, polyethylene terephthalate, cellulose, gelatin, chitin, polypeptides, polysaccharides, polynucleotides and mixtures thereof.

An implant as taught implanted in the body is inherently secured in the neural tissue.

Claim 26, inherently some of the nanotubes are “aligned”.

Claims 15, 22-23, 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Mattson et al (6,670,179).

Mattson et al teaches the use of a neural implant comprising nanomaterial comprising nanotubes. The implant is fully capable of minimizing scar formation.

Mattson et al teaches:

"A cell and substrate system and nerve regeneration implant are disclosed including a carbon nanotube and a neuron growing on the carbon nanotube. Both unfunctionalized carbon nanotubes and carbon nanotubes functionalized with a neuronal growth promoting agent may be utilized in the invention. A method is also disclosed for promoting neuronal growth."

"In accordance with an additional aspect of the present invention, the carbon nanotube 10 may be functionalized with a neuronal growth promoting agent. The neuronal growth promoting agent may be selected from a group consisting of 4-hydroxynonenal, acetylcholine, dopamine, GABA (g-aminobutyric acid), glutamate, serotonin, somatostatin, nitrins, semaphorins, roundabout, calcium (Ca.sup.2+) mixtures thereof."

Claim 26, inherently some of the nanotubes are "aligned".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce E. Snow whose telephone number is (571) 272-4759. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4754. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bruce E Snow/
Primary Examiner, Art Unit 3738